



Instructor Handbook 2019

Thank you for volunteering to teach a Code First: Girls (CF:G) course. We are delighted to have you on board with our mission to get young women skilled up and pursue careers in tech and entrepreneurship.

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Background to Code First: Girls

Since 2015, we have worked with 6,000+ young women, providing them with £2.5 million worth of free coding courses. We have a real impact on the careers the participants choose - from working in or building their own tech startup to becoming junior software developers.

The work you do as volunteer instructors really is making a difference to these young women's lives. You can see some of our alumni stories on our [Alumni Wall of Fame!](#)

What we offer

Free activities we run for our students include:

[Free community courses:](#)

- A **beginners' course** which introduces HTML, CSS, JavaScript, Git, GitHub collaboration, **Twitter Bootstrap**, and more (8 weeks)
- **Advanced courses**, usually focusing on either **Python** or **Ruby** (8 weeks)

[Masterclasses](#) and Hackathons:

- Masterclasses and Hackathons on a variety of subjects (1 day and weekends)

Hack Your Career events & [other events](#):

- Other personal and skills development events

To read more about what we do and how we do it, visit [our website](#). If you have any queries, please contact us at programmes@codefirstgirls.org.uk. You can also read [Appendix A](#).

The Instructor's role

As a course instructor, you play a critical role in our organisation and how we run the classes. We find that the instructor is pivotal to how the girls experience CF:G - you not only guide them through the course, but set the tone and atmosphere for the class. We will provide you with all course materials and share what we have found to be good ways to deliver the content.

The core instructor responsibilities:

- Select participants via the application sheet we will share with you
- Take attendance for each class
- Deliver the course
- You are not required to mark any homework, but we do ask you to answer questions/ students posts about the course on the course Slack channel

- Select the winner of the competition from your class in the last session of your course
- Update Code First:Girls on the progress of the course

All new instructors are required as standard to sign a voluntary teaching contract, and to attend a briefing call. This is a critical part of your onboarding, as this is where we will take you through the content and the application process, and advice you on how to deliver course (based on previous instructors feedback).

The Student's role

Student Participant obligations:

- Provide their own laptop
- Complete the pre-class preparation, and homework during the programme
- Attend all the classes (it's ok to miss one)
- Complete their final course competition by the final session (more about this is on the next page)

The Ambassador's role

Course Ambassador:

The course ambassador is a volunteer student from the course, who comes on board to help with organising the course within the university or host company and the course social activities. We will introduce you to the ambassador of your course before the first session.

Their main duties include:

- Remind instructors to keep attendance for every session of the course (the ambassadors do not have access to the attendance spreadsheet due to the GDPR policies)
- Research and organise a social after the second week's class
- Feed back to the CF:G team about course progress

Necessary documents

Instructor Handbook

This handbook will be your guide to unlocking your amazing instructor skills. It includes all the key contacts, tips, and advice. It will accompany the briefing phone call.

Course curriculum

The key course documents that the students use for the course:

- [HTML/CSS](#)
- [Python](#)
- [Ruby](#)

Instructor slides and script (Beginners course)

The slides and scripts have been compiled to help you with classroom delivery of the course. They are optional to use, but many instructors find them helpful to deliver the course. However, please cover all the content for each week in each class.

All relevant links, including syllabus and individual week-by-week course outlines, can be found in the onboarding email we send to you. Once you're on-boarded you will receive a link to the relevant curriculum folder.

If you have any questions, please email us at programmes@codefirstgirls.org.uk.

Competition

Every course involves a Competition project. This gives students the opportunity to apply their knowledge, and we also offer a prize of Amazon vouchers for each person in the winning project team.

You can view some example of previous winners on our [website](#).

The course process from beginning to end

Before the course

Our responsibilities:

- ☐ Let you know when the instructor briefings will take place
- ☐ Connect you to other instructors you will be delivering the course with and your course ambassador
- ☐ Provide the teaching materials and course delivery guidance material
- ☐ Recruit students to attend the course (via our online applications) and send you all applications for your review

Your responsibilities:

- ☐ Attend the pre-course briefing call
- ☐ Study the course materials and familiarise yourself with the content for each class
- ☐ Select students to take the course from all applications (see [Appendix B](#))
- ☐ Contact your lead instructor/assistant instructor(s) to discuss and agree between you how you would like to deliver the course

- ❑ Touch base with the course ambassador (where assigned).

Pre-course schedule

Please note this is in an ideal scenario, with some courses we do have a quicker turnaround, but will always endeavour to give suitable notice.

| Timing | Activity |
|-----------------|--|
| 4-8 weeks prior | <ul style="list-style-type: none"> • Application forms open, publicised on our website and social media • Briefing call with the instructors |
| 2 weeks prior | <ul style="list-style-type: none"> • Applications close • Instructors assess applications |
| 1-2 weeks prior | <ul style="list-style-type: none"> • CF:G notify applicants of the outcome • Inform successful candidates of all key details (dates, times, location, syllabus, CF:G contact details etc.) |
| | <ul style="list-style-type: none"> • Start of the course! |

During the course

Our responsibilities:

- ❑ Support you through your involvement with CF:G, answering any questions you might have about the content or delivery
- ❑ Respond in a timely manner to any queries you have about the course and resolve any issues you might encounter regarding the room or other stakeholders

Your responsibilities:

- ❑ **Deliver the course**
The CF:G courses are all 7-8 weeks long and are attended by students in their free time, outside of their normal studies. As such we are conscious that students often have time and workload pressures which can impact their attendance and commitment to the course.
We do try to screen for motivated students through our selection process, but also aim to deliver engaging course content delivered in more of an interactive 'labs' format, where students are encouraged to ask questions and work with each other rather than a traditional lecture approach.
- ❑ **Take the attendance in every session**
All instructing teams are required to take a record attendance at each lesson.

If individuals are not attending classes, we will follow up with them. If anyone has informed you they are not able to attend a class, please let us know by adding a comment on the attendance spreadsheet (right click on the cell with the number of the missing session, on the row of the student's name, "Insert a comment").

- ☐ Answer questions/students' posts on the Slack channel
- ☐ Identify which students should receive a certificate of completion at the end of the course.
- ☐ Feed back any comments regarding the course content to the CF:G team via your nominated CF:G team member

After the course - Feedback

Feedback from instructors and students is really important to us here. You are our eyes into the course, and whilst we will aim to visit as many courses as we can in person, due to the number of courses we run this is not always possible.

For urgent feedback, please contact us at programmes@codefirstgirls.org.uk.

We also send feedback forms to both students and instructors following the course. Feedback analysis from previous courses can be sent upon request.

Class delivery best practice

The CF:G classes are less "lecture", more labs. What this means is that the majority of the time should be spent working on the exercises.

One of the most common class issues is that they overrun. Have a chat with your Lead/Assistant(s) about timings in advance, plan how much time you want to spend on each introduction and exercise. Please make sure you cover each session within the time allocated to it.

I'm new to teaching... What should I do?

If you are a new instructor to CF:G we will "buddy" you, wherever possible, with a more experienced instructor, and you will begin as an Assistant Instructor. If possible (even if you are an experienced teacher) we would encourage you to visit a course given by an instructor who has been involved with CF:G before, or speak to them about what they found were effective ways to deliver the content.

You can also be in touch with other CF:G Instructors on the [Instructor Facebook group](#), or via [LinkedIn](#) and [Twitter](#). We are also happy to facilitate you and put you in touch with other fellow instructors.

If your course has never been taught at your centre before, we will buddy you with another, experienced instructor, at a different location. This usually means you will be in touch with your buddy via online channels such as email, Skype or Google hangouts.

Instructor Top Tips

- **Break the ice in the first session;** go around the room and get everyone to introduce themselves, say where they work or what they are studying, why they want to learn how to code. You can ask a silly question. In the past I have gone with "What is your favourite cheese?", "What is your favourite holiday destination?" and "What is your spirit animal?" - be creative!
- **Use your own words and explanations;** don't go through the notes slide by slide, instead use your own words & run the sessions as a lab; let people get cracking. As and when issues arise, get everyone's attention and go through the issues.
- **Encourage students to ask questions;** do this in whatever way you can, even if it means just standing and not saying anything for a few seconds and just reiterating that people should ask any questions they may have. The hardest bit is to get people to ask the first question - once that happens, then you will get a flood of questions.
- **Catering for all ability levels;** each intake will naturally have a small number of students that are really good, a small number of students that are struggling to keep up and the large majority of them somewhere in the middle. Try and balance each session to cater for as many people as possible. Try and give *optional* challenges, which is what usually keeps the really good students going. Try and give extra support out of hours for weaker students if you want to keep them coming back (assuming you have the time).
- **Translate concepts into simple English.** Concepts such as classes versus IDs in CSS and why they're distinct and important might be obvious to instructors, but not so much to someone who might not immediately see why it's important.
- **Suggested running order for each topic:**
 1. Introduce the section; what are you going to cover in this topic
 2. Exercise time - specify the time allocated to complete the exercise
 3. Move around the classroom and answer any questions whilst students do exercises
 4. At the end of the allocated time, ask how many have completed the exercise. Move on if $\frac{3}{4}$ complete.

Final note & Contact details

If you have any questions about any of the content in this handbook, send us an email at programmes@codefirstgirls.org.uk, or discuss your questions during the instructor briefing session.

Thank you again for taking part in this wonderful project. We hope you have just as much fun as the students on this journey and take away a lot from the experience.

Appendix A - Frequently asked questions about Code First:Girls

How do you fund Code First: Girls?

We fund the programme through corporate and philanthropic donations. We are keen that the course is always free to non-sponsored participants - charging creates another barrier to entry.

How do you select the participants?

We are frequently inundated with applications for each course. The application requires the learner to demonstrate their interest in coding and tech, but they are not required to have any previous experience or specialist knowledge. We are looking for smart, ambitious young women who really see that coding can become part of their future career path.

I want to include some other material in my course, is that ok?

If you find any support materials that you think would be useful to the learners, we would love you to use them. Please do share them with us so we can add them to the curriculum for the future to assist other Instructors.

Why do you talk about girls, rather than women?

We know that calling the programme Code First: 'Girls' can be controversial. The reason we are branded this way is because while doing customer research we found university stage women self identified as being 'girls' rather than 'women'.

Why do you focus on university level and early career women?

We know there are a tonne of fantastic organisations teaching kids at schools and sixth forms across the country. Using our university network, we wanted to reach young women who might not have had the chance to learn about programming while at school, but who are still interested in careers at tech. We believe that catching them at this stage is vital to helping them change their career preferences.

What is your relationship with the universities?

It depends on the university. Some universities are involved on a departmental level, others through the careers service and some through the students themselves. We are always keen to build our relationship with the university and if you're able to help us with this, please drop us a line.

Appendix B - Student selection

Student selection process

Instructors on a CF:G course play a key role in the selection of candidates for the courses. This is done for two reasons:

- It avoids the CF:G central team becoming a bottleneck for the courses launched
- It allows the instructors to get to know their students better, including more about their background and coding experience prior to the course. It also helps instructors to better tailor their course content and delivery.

General points about the courses...

- Most of the courses we run aim to have a minimum of 15 people on the course, and a maximum of 35. We value your time spent on this programme, so we wouldn't ask you to commit to a course without a reasonable number of students attending. We ask instructors to use their best judgement based on the number of applications received.
- Do expect around a 25% drop off over the course (so admit circa 25% more than you want on the course)

The students apply through the form on our website. Based on the answers, instructors decide how suitable the student will be to join the course.

Once applications are closed, you will be sent the applications in a Google spreadsheet.

- Give each student a rating of 1,3,5:
5 - definitely in; 3 - waiting list; 1 - no, in the column marked with your name.
- CF:G will email all applicants with the decision

Applications process:

1. CF:G open applications (via our website)
2. CF:G will give you the schedule for closing applications. This is when we will need your assessment.
3. We will send through a Google spreadsheet, containing all applications. Due to our data protection rules we ask that you **do not** download this document, but amend it within the Google drive platform. There will be column for you to add your assessment.
4. Once this is complete, notify your CF:G contact.
5. CF:G will notify all successful applicants.

Application questions for beginners course with sample answers:

Answers expected for all questions on application except the last question.

Q: What is your proudest achievement? - Tell us about an impressive achievement that will make you stand out. Think about societies you have been part of, or set up, think of charities you have run, shops or stalls you have sold from, or pop up restaurants you might have produced. We want to see that you have a self-starting personality.

Check they have shown initiative, and look for an achievement rather than just e.g. an internship.

Good examples:

“I ran a charity event week in aid of Macmillan Cancer at my school. I had to organise my whole house to make sure that as many people as possible volunteered with the bake sales, general fundraising and blind date event that we hosted. My blind date event was the most popular charity event of that year, and we broke the school record for fundraising: £800. My idea for the tickets to the event is what I am most proud of, and to which I attribute most of the events success. I produced hundreds of orange wristbands that the school children wore in the week running up to the event, which showed them who else was going and made a visible buzz on the school site; I can only imagine what it would have been like with a social media presence as well!”

“My proudest achievement was exciting the success of The Bridge of Sighs Commemoration Ball for Hertford College as Ball President. For the first time in the Hertford College history a Ball was held on site for 600 people. It took over a year to organise including getting permission to use the site from the board of fellows and applying for the street closure of Cattle street. I was in charge of a committee of 15 people which organised everything from health and safety matters to the decoration of the site. As a result I have learnt a great deal about starting and executing a project from scratch and coordinating the interests of many different parties.”

“I worked at the European Commission for 6 months as part of an official internship. There I kick started an alumni network for trainees. Under my leadership my team and I successfully negotiated support from Commission President Barroso’s cabinet, developed a strong online presence and coordinated the first alumni reunion with over 200 attendants. It felt great to work together to realise something from nothing and create something new.”

Q: What will Code First:Girls enable you to create that you cannot currently?

Preference is for individuals whose purpose for learning is to create something rather than just further learning.

Q: What is your favourite startup? Why? We're interested in TECH start-ups. Think about what tech start-up you're most interested or impressed by and a few reasons why you think they're awesome. If you're stuck, do some research to find a tech company that interests you. *Screen for thoughtful answers with appropriate explanations. Check it is a tech based company rather than general entrepreneurship.*

Good examples:

“My favourite startup is Airbnb, a company that has enhanced my travelling experience in that I now stay at quirky, lovely flats or houses in the places I visit and am able to get insider tips from the locals who rent those rooms out. Airbnb has done a great job in connecting people with places to stay all over the world, and has also shown a charitable side by enabling people to offer free accommodation during natural disasters.”

“Memrise. Because it deals with education, and can really hook people up into learning languages. It is expanding pretty fast and having met the people who run it I can say it has great perspectives. It keeps developing and introducing new ideas while remaining accessible simple to use and being visually attractive.”

“Grabble is one of my favourite startups. Having previously worked at an online fashion startup, I thought it was a very clever response to a real gap in the online shopping market and is something that I personally find very useful. I like the user-friendly website, and how it integrates social media.”

Q: What efforts, if any, have you made to learn to code already? Be specific here - let us know what resources you've used or if you've tried any languages out already. *Preference made to those who have made some effort to use online resources or learn from friends. However, if they are complete beginners but very keen, that's also ok for the beginners course. For the Python/Ruby course, some basic coding knowledge is required.*

Q: What excites you about tech?
General screening for enthusiasm!

Q: Have you ever thought of starting your own startup? If so, what ideas have you had?
Check for tech based/tech enabled idea

Q: Anything else you would like us to know?
Check for enthusiasm again. However, an answer to this question is not obligatory.