

Course and Examination Fact Sheet: Spring Semester 2025

8,031: Behavioral Science & Technology

ECTS credits: 6

Overview examination/s

(binding regulations see below)

decentral - Active participation, Analog, Individual work individual grade (20%)

Examination time: Term time

decentral - Presentation, Analog, Group work group grade (60%)

Examination time: Term time

decentral - Presentation, Analog, Individual work individual grade (20%)

Examination time: Term time

Attached courses

Timetable -- Language -- Lecturer 8,031,1.00 Behavioral Science & Technology -- English -- de Bellis Emanuel

Course information

Course prerequisites

This course is assigned to the «Digital Channel & Customer Relationship Management» profile and the «Technology Solution Architect» profile but can also be taken without selecting a specialization.

The course does not have any hard requirements. However, the following will be helpful:

- Basic methods knowledge (descriptive statistics, inference statistics)
- General interest in empirical research and experimental designs

Learning objectives

After taking this course you should:

- Have developed an understanding of how new technologies are used and perceived in the modern technology landscape
- Be able to describe how insights from behavioral science can be used in the context of new technologies
- Be able to analyze behavioral data from online, lab, and field experiments
- Be able to provide a report on the data analysis in written form
- Be able to present findings from the data analysis and discuss its implications

Course content

From determining the musical characteristics of a Grammy-awarded hit song to training a social robot that interacts with elderly people, new technologies such as artificial intelligence (AI) are as useful as they are ubiquitous. For example, considering its huge potential, business leaders need to attain a practical grounding in AI and its underlying techniques and methods, in order to effectively take advantage of it and navigate the challenges associated with its implementation. Yet despite



Al's omnipresence, few truly understand what is going on under the hood of these complex algorithms-and how they impact individuals, firms, and society at large.

This course provides students with a better understanding of the opportunities that have and will emerge from new technologies based on an interdisciplinary perspective that is grounded in behavioral science. As such, the course combines insights from psychology, consumer research, human-computer interaction and related disciplines. Importantly, the course is meant to advance students' methodological skills that are necessary to take full advantage of the potential of new technologies.

The course focuses on key data analysis tools, which are discussed in context of new technologies. Specifically, the course uses the context of automation, smart products, and the Internet of things to establish causality with experimental designs and related approaches. In discussing these topics, the course touches on additional important topics such as ethics when applying new technologies and the limits and risks of new technologies.

Throughout the course, students will use a survey software tool as well as the statistics program R to deal with data. By participating in this course, students will learn how to measure and quantify everyday behavior, which is highly useful in an increasing number of industries. The overall learning objective is to improve students' analytical skills while increasing their understanding of how new technologies affect individuals, firms, and society. The course is offered by the Institute of Behavioral Science and Technology at the University of St. Gallen (IBT-HSG).

Course structure and indications of the learning and teaching design

This course counts 6 credits. Accordingly, the total workload for students is 180 hours. This includes self-study, campus time, project work, discussions, and all examinations. The course is conducted in a hybridformat with blended learning elements presented via Canvas and synchronous class meetings. The course will be offered as a mix of online materials, offline interactive sessions, blocked sessions, and self-study elements.

Further explanation of the teaching and learning design:

This course will be facilitated online through Canvas. Required readings and other course material (e.g., relevant video clips) will be posted on Canvas. Announcements will also be made through Canvas. You can submit any questions you have to the relevant discussion thread. Please post content-related questions in Canvas so everyone can benefit from the answers. The course design consists of two learning pillars:

1. Conceptual knowledge (asynchronous):

In this flipped classroom style part of the course students will learn about the essential concepts that are necessary to understand the content of the bootcamp sessions. Learning progress will be facilitated with online videos, quizzes, and some essential readings.

2. Applied knowledge (synchronous):

In this part of the course, students will use their newly acquired knowledge from part 1 and learn how to analyze behavioral data from a source of their choice. In addition to these sessions, students will need to work on their own empirical project. Results of that project will need to be presented at the end of the course. Presentations need to include considerations from both parts of the course and need to be accompanied by a written report.

Course literature

This list of readings will be updated during class.

Additional course information

--

Examination information

Examination sub part/s



1. Examination sub part (1/3)

Examination modalities

Examination type Active participation

Responsible for organisation decentral

Examination Form Oral examination

Examination mode Analog
Time of examination Term time
Examination execution Synchronous
Examination location On Campus

Grading type Individual work individual grade

Weighting 20% Duration --

Examination languages Question language: English Answer language: English

Remark

__

Examination-aid rule

Free aids provision

Basically, students are free to choose aids. Any restrictions are defined by the faculty members in charge of the examination under supplementary aids.

Supplementary aids

--

2. Examination sub part (2/3)

Examination modalities

Examination type Presentation Responsible for organisation decentral

Examination form Oral examination

Examination mode Analog
Time of examination Term time
Examination execution Asynchronous
Examination location On Campus

Grading type Group work group grade

Weighting 60%
Duration --

Examination languages Question language: English Answer language: English

Remark

--

Examination-aid rule

Free aids provision

Basically, students are free to choose aids. Any restrictions are defined by the faculty members in charge of the examination under supplementary aids.

Supplementary aids

--

3. Examination sub part (3/3)

Examination modalities

Examination type Presentation
Responsible for organisation decentral

Examination form Oral examination

Examination mode Analog
Time of examination Term time
Examination execution Asynchronous
Examination location On Campus

Grading type Individual work individual grade

Weighting 20% Duration --

Examination languages Question language: English

Answer language: English

Remark

__

Examination-aid rule

Free aids provision

Basically, students are free to choose aids. Any restrictions are defined by the faculty members in charge of the examination under supplementary aids.

Supplementary aids

__

Examination content

Individual student presentation

In the individual presentations, students will present an original research article on behavioral science and technology. Emphasis will be placed on accurately and concisely presenting and critically reflecting the article.

Active participation

The participation and presence part of the examination will be evaluated based on the active participation during the sessions and the engagement in the Canvas online forum.

Group presentation and report

In the presentation and report part of the examination, groups of students will be required to apply their newly acquired practical method skills in an empirical project. Specifically, they will need to either conduct an empirical study or find a suitable dataset to apply the acquired analytical skills to and write a written report on the applied method and its results. At the end of the course, the groups will present their method and results to the class and answer questions from their peers and the lecturer team.

Presentation slides must be uploaded to Canvas two days before the presentation (PDF).



Timing of the presentation: 20 min + 10 min Q&A + general discussion at the end.

Examination relevant literature

In addition to the lecture slides and the content of all in-class discussions, relevant journal articles, digital content and additional readings will be announced and made available during the course.

Please note

Please note that only this fact sheet and the examination schedule published at the time of bidding are binding and takes precedence over other information, such as information on StudyNet (Canvas), on lecturers' websites and information in lectures etc.

Any references and links to third-party content within the fact sheet are only of a supplementary, informative nature and lie outside the area of responsibility of the University of St.Gallen.

Documents and materials are only relevant for central examinations if they are available by the end of the lecture period (CW21) at the latest. In the case of centrally organised mid-term examinations, the documents and materials up to CW 13 (Monday, 25 March 2025) are relevant for testing.

Binding nature of the fact sheets:

- Course information as well as examination date (organised centrally/decentrally) and form of examination: from bidding start in CW 04 (Thursday, 23 January 2025);
- Examination information (supplementary aids, examination contents, examination literature) for decentralised examinations: in CW 12 (Monday, 17 March 2025);
- Examination information (supplementary aids, examination contents, examination literature) for centrally organised mid-term examinations: in CW 14 (Monday, 31 March 2025);
- Examination information (regulations on aids, examination contents, examination literature) for centrally
 organised examinations: two weeks before ending with de-registration period in CW 15 (Monday, 07 April
 2025).