# COUNTY COLLEGE OF MORRIS
## Course Information Outline

| Course Title: | Mobile App Programming | Prefix and Number: | CMP-271 |
|---|---|---|---|

| Total Credits: | 3 | Credit Type: | UG /IN | Course Fee: | Yes |
|---|---|---|---|---|---|
| Lecture: | 2 | Lab, Studio, Performance: | 1 | Cooperative, Clinical, Internship, Practicum: | |

| IT Chairperson Approval | Nancy Binowski | Date: | 9/11/2015 |
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| BMET Dean Approval | Patrick Enright | Date: | 9/14/2015 |

**General Education Information:**

**Categories:**

**Integrated Goals**: *(check all that apply)*

1. **Catalog Course Description**

   This second course in a series of mobile app development courses covers advanced design elements and programming constructs. Topics include accessing device resources including the camera, accelerometer, and GPS; utilizing local and networked database services; animation and gaming; accessing background services; file management; designing for multiple devices including wearables; and localization/internationalization and accessibility design. Students will create apps individually and as part of a team and their learning will culminate with the development of a final project that will be of industry-level quality.

2. **Prerequisite(s)**

   CMP-170

3. **Co-requisite(s)**

4. **Textbooks**

   (1-1) Android How to Program

5. **Supplementary Books and/or Materials**

**6.    Specialized equipment, supplies, facilities, for classes limited by enrollment or restricted by accreditation and/or equipment limitations.**  (Information will be used to determine differential funding category.)

Department-funded development test devices (smartphones, tablets)

**7.    Course Content (List of Topics)**

(1-1) Shared Preferences
(1-2) SQLite Database
(1-3) Advanced GUI Components
(1-4) File Management
(1-5) Intent Choosers
(1-6) Action Bar Menus
(1-7) Animation
(1-8) Game Applications – Canvas
(1-9) Camera
(1-10) GPS
(1-11) Accelerometer
(1-12) Background Services
(1-13) Maps
(1-14) Styles
(1-15) Design for Multiple Devices - Wearables, TV, Auto
(1-16) Localization/Internationalization
(1-17) Accessibility
(1-18) App Production Cycle

**8.    Statement of Course LEARNING OUTCOMES**
The student who successfully completes this course should be able to:

Develop apps according to specification.
Work efficiently and effectively with others to jointly develop an app.
Apply the App Production Cycle to create an industry-level quality app.

**9.    Statement of Relation to Curriculum(s)**

A required course in the Mobile App Development track of the AAS in Information Technology degree. CIS Elective for AS in Computer Science, AAS in CIS-Technical Support, AAS in CIS-Management Information Systems and AAS in CIS-Game Development.

**10.    Format for offering the course (check all that apply)**

HYBRID
TRADITIONAL